

DECISION DOCUMENTATION PACKAGE
COVER SHEET

PREPARED IN ACCORDANCE WITH

TRACK 1 SITES:
GUIDANCE FOR ASSESSING
LOW PROBABILITY HAZARD SITES
AT INEL

SITE DESCRIPTION: CONTAMINATED SOIL IN TANK FARM AREA NEAR VALVE
Box B-9

SITE ID: CPP-30

OPERABLE UNIT: 3-07

WASTE AREA GROUP: 3

I. SUMMARY - PHYSICAL DESCRIPTION OF THE SITE:

This site was an area of radioactively contaminated soil near tank farm valve box B-9 that was discovered by maintenance personnel on June 2, 1975. The contamination covered an area of approximately 400 ft² and showed radiation levels ranging up to 1 R/hr. The contamination was from a one-time preventative maintenance activity in which residual decon solution from the floor of the valve boxes contaminated personnel clothing and equipment. The contaminated clothing was brought to the surface via maintenance personnel. Clothing and equipment that were placed on blotter paper covering the ground surface. This paper was torn when walked on, allowing the contaminated material to contact the soil.

II. SUMMARY - QUALITATIVE ASSESSMENT OF RISK:

Due to the fact that the site has been excavated, the qualitative assessment of risk is low with a high overall reliability.

III. SUMMARY - CONSEQUENCES OF ERROR:

Current surface radiation surveys (ref. 3, 5) do not indicate surface radiation in this area, therefore any error would leave undetected contamination in the subsurface. Based upon process knowledge, only low level radiation would be expected in the soil. Compared to the balance of the tank farm units, this site will not contribute significantly to the background radiation levels found in the tank farm.

IV. SUMMARY - OTHER DECISION DRIVERS:

None.

SIGNATURES**I # PAGES:****DATE:**

Prepared By:

DOE WAG Manager:

Approved By:

Independent Review:

PROCESS/WASTE WORKSHEET SITE ID CPP-30

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Col 1 Processes Associated with this Site	Col 2 Waste Description & Handling Procedures	Col 3 Description & Location of any Artifacts/Structures/Disposal Areas Associated with this Waste or Process
Process Preventative maintenance in waste transfer valve box	Residual decon solution from the floor of the valve boxes and/or contaminated blue valve grease.	Artifact: Concrete valve boxes. Location: Within valve boxes B-4 and B-9. Description: The transfer lines and valves are contained within an accessible valve box to aid in preventative maintenance. Artifact: Location: Description: Artifact Location Description
Process		Artifact Location Description Artifact Location Description Artifact Location Description
Process		Artifact Location Description Artifact Location Description Artifact Location Description

CONTAMINANT WORKSHEET

SITE ID CPP-30

PROCESS (col 1) PM of valve box areas

WASTE (col 2) CONTAM, DECON SOLUTION, BLUE

VALVE GREASE

Col 4 What known/potential hazardous substances/constituents are associated with this waste or process?	Col 5 Potential sources associated with this hazardous material	Col 6 Known/estimated concentration of hazardous substances/constituents ^a	Col 7 Risk based concentration mg/kg	Col 8 Qualitative risk assessment (Hi/Med/Low)	Col 9 Overall reliability (Hi/Med/Low)
Radionuclides	N/A, Contaminated soil removed	N/A		Low	High
Metals	N/A, Contaminated soil removed	N/A		Low	High
Acids	N/A, Contaminated soil removed	N/A		Low	High
Organics	N/A, Contaminated soil removed	N/A		Low	High

a. ND = not detected
DL = detection limit in ppm

Question 1. What are the waste generation process locations and dates of operation associated with this site?

Block 1 Answer:

On June 2, 1975, CPP maintenance personnel were in the process of doing preventative maintenance (PM) work on waste valves located in tank farm underground valve boxes B-5 and B-9. Decontamination work had been completed on these boxes by Operations and Technical department personnel. Pre-work surveys showed B-9 to have the following radiation readings: 10 R/hr beta & gamma and 500 mR/hr gamma. Box B-5 had considerably lower readings and was not the main contributor to the later contamination problems. The valve bonnet assemblies removed from the valve boxes had blue lubricating grease on them and the extension handle universal joints were covered with a thin layer of rust. No other residual materials were noted on the valve bonnet assemblies. The work was discontinued and an area of approximately 20'x 20' near boxes B-5 and B-9 was ribboned off by Health Physics.

Work on the valve boxes resumed on June 3, 1975. The ribboned off ground area was wetted with water to reduce the potential for dust. The valve PM job in boxes B-5 and B-9 was completed on June 5, 1975. All contaminated equipment was removed from the area. As a result of the maintenance operations, the 20'x 20' ribboned area was contaminated as follows: near B-9 box (approx. 1 R/hr beta & gamma), rest of area (100 mR/hr beta & gamma to 1000 cpm). This contamination was probably from residual decon solution from the floor of the valve boxes that was brought to the surface via maintenance personnel clothing and equipment, and/or contaminated blue valve grease, or contamination from the valve bonnet assembly parts (bellows, plug, etc.) that were placed on blotter paper covering the ground surface. This paper was torn cut when walked on, allowing the contaminated material to contact the soil.

Contaminated dirt from the 20'x 20' ribboned area was loaded into four 55 gallon barrels and sent to the RWMC. The above ground contaminated valve handles and pipe were decontaminated.

Block 2 How reliable is/are the information source/s? ☒ High ☐ Med ☐ Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Information was obtained from a Significant Operating Occurrence Report (SOOR).

Block 3 Has this INFORMATION been confirmed? ☒ Yes ☐ No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Personal communication with the originator of the SOOR.

Block 4 **SOURCES OF INFORMATION** (check appropriate boxes & source number from reference list)

No available information	<input type="checkbox"/>	Analytical data	<input type="checkbox"/>
Anecdotal	<input type="checkbox"/>	Documentation about data	<input type="checkbox"/>
Historical process data	<input type="checkbox"/>	Disposal data	<input type="checkbox"/>
Current process data	<input type="checkbox"/>	Q.A. data	<input type="checkbox"/>
Areal photographs	<input type="checkbox"/>	Safety analysis report	<input type="checkbox"/>
Engineering/site drawings	<input type="checkbox"/>	D&D report	<input type="checkbox"/>
Unusual Occurrence Report	<input checked="" type="checkbox"/> 1	Initial assessment	<input type="checkbox"/>
Summary documents	<input type="checkbox"/>	Well data	<input type="checkbox"/>
Facility SOPs	<input type="checkbox"/>	Construction data	<input type="checkbox"/>
OTHER	<input checked="" type="checkbox"/> 2		

Question 2. What are the disposal process locations and dates of operation associated with this site?

Block 1 Answer:

Contamination was from a one-time preventative maintenance activity with inadequate soil protection. There are no waste disposal processes associated with this site.

Block 2 How reliable is/are the information source/s? x High Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Information was obtained from a Significant Operating Occurrence Report (SOOR).

Block 3 Has this INFORMATION been confirmed? x Yes No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Personal communication with the originator of the SOOR (ref.2)

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____	Analytical data	<input type="checkbox"/>	_____
Anecdotal	<input type="checkbox"/>	_____	Documentation about data	<input type="checkbox"/>	_____
Historical process data	<input type="checkbox"/>	_____	Disposal data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____	Q.A. data	<input type="checkbox"/>	_____
Aerial photographs	<input type="checkbox"/>	_____	Safety analysis report	<input type="checkbox"/>	_____
Engineering/site drawings	<input type="checkbox"/>	_____	D&D report	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input checked="" type="checkbox"/>	<u>1</u>	Initial assessment	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____	Well data	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____	Construction data	<input type="checkbox"/>	_____
OTHER	<input checked="" type="checkbox"/>	<u>2</u>			

Question 3. Is there empirical, circumstantial, or other evidence of migration?
If so, what is it?

Block 1 Answer:

The soils were wetted with water to reduce the potential for windblown dust, and the contaminated soil was removed and sent to RWMC. Also, the 1990 and 1991 surface radiological surveys (ref. 3, 5) did not detect any radioactive contamination in this area above background levels. There is no evidence that the contamination has migrated from the site.

Block 2 How reliable is/are the information source/s? x High Med Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The SOOR (ref. 1) stated that the contaminated dirt from the 20'x 20' ribboned area had been removed. The surface radiological survey is an annual practice.

Block 3 Has this INFORMATION been confirmed? x Yes No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Personal communication with the originator of the SOOR (ref. 2). This area was re-surveyed in 1991 (12/20/91), per a request by WINCO Environmental Restoration (ref. 4).

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____	Analytical data	<input checked="" type="checkbox"/>	<u>4</u>
Anecdotal	<input type="checkbox"/>	_____	Documentation about data	<input type="checkbox"/>	_____
Historical process data	<input type="checkbox"/>	_____	Disposal data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____	Q.A. data	<input type="checkbox"/>	_____
Aerial photographs	<input type="checkbox"/>	_____	Safety analysis report	<input type="checkbox"/>	_____
Engineering/site drawings	<input checked="" type="checkbox"/>	<u>3, 5</u>	D&D report	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input checked="" type="checkbox"/>	<u>1</u>	Initial assessment	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____	Well data	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____	Construction data	<input type="checkbox"/>	_____
OTHER	<input checked="" type="checkbox"/>	<u>2</u>			

Question 4. Is there evidence that a source exists at this site? If so, list the sources and describe the evidence.

Block 1 Answer:

There is no evidence that a source exists at this site. The SOOR (ref. 1) stated that the contaminated soil was loaded into four 55 gallon barrels and hauled to the RWMC. Also, the 1990 and 1991 surface radiological surveys did not detect any radioactive contamination in this area above background levels. Due to the limited extent of contamination, and the area that reportedly was cleaned up, no source remains.

Block 2 How reliable is/are the information source/s? ☒ High ☐ Med ☐ Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The SOOR stated that the contaminated dirt from the 20'x 20' ribboned area had been removed. The surface radiological survey is an annual practice.

Block 3 Has this INFORMATION been confirmed? ☒ Yes ☐ No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

The results of the 1990 and 1991 surface radiological surveys (ref. 3, 5) did not detect any radioactive contamination in this area above background levels. This area was re-surveyed in 1991 (12/20/91), per a request by WINCO Environmental Restoration (ref. 4).

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>		Analytical data	<input checked="" type="checkbox"/>	4
Anecdotal	<input type="checkbox"/>		Documentation about data	<input type="checkbox"/>	
Historical process data	<input type="checkbox"/>		Disposal data	<input type="checkbox"/>	
Current process data	<input type="checkbox"/>		Q.A. data	<input type="checkbox"/>	
Areal photographs	<input type="checkbox"/>		Safety analysis report	<input type="checkbox"/>	
Engineering/site drawings	<input checked="" type="checkbox"/>	3, 5	D&D report	<input type="checkbox"/>	
Unusual Occurrence Report	<input checked="" type="checkbox"/>	1	Initial assessment	<input type="checkbox"/>	
Summary documents	<input type="checkbox"/>		Well data	<input type="checkbox"/>	
Facility SOPs	<input type="checkbox"/>		Construction data	<input type="checkbox"/>	
OTHER	<input type="checkbox"/>				

Question 5. Does site operating or disposal historical information allow estimation of the pattern of potential contamination? If the pattern is expected to be a scattering of hot spots, what is the expected minimum size of a significant hot spot?

Block 1 Answer:

The SOOR indicated an area of approximately 20'x 20' to be contaminated. Near valve box B-9 the contamination was approximately 1 R/hr beta & gamma, while the rest of the area ranged from 100 mR/hr beta & gamma to 1000 cpm. The contamination would have resulted from maintenance personnel walking on the ground surface after having been in the valve box areas, as well as from contaminated equipment being placed on the it. Thus, the pattern of contamination from the initial contamination event would have been a scattering of hot spots. The size of these spots is not known. Since the contaminated soil had been cleaned up, these hot spots no longer exist.

Block 2 How reliable is/are the information source/s? ☒ High ☐ Med ☐ Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

Information was reported in SOOR #75-21.

Block 3 Has this INFORMATION been confirmed? ☒ Yes ☐ No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

Personal communication with the originator of the SOOR, (ref. 2) and the results of the 1990 and 1991 surface radiological surveys (ref. 3, 5).

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>		Analytical data	<input type="checkbox"/>	
Anecdotal	<input type="checkbox"/>		Documentation about data	<input type="checkbox"/>	
Historical process data	<input type="checkbox"/>		Disposal data	<input type="checkbox"/>	
Current process data	<input type="checkbox"/>		Q.A. data	<input type="checkbox"/>	
Aerial photographs	<input type="checkbox"/>		Safety analysis report	<input type="checkbox"/>	
Engineering/site drawings	<input checked="" type="checkbox"/>	3, 5	D&D report	<input type="checkbox"/>	
Unusual Occurrence Report	<input checked="" type="checkbox"/>	1	Initial assessment	<input type="checkbox"/>	
Summary documents	<input type="checkbox"/>		Well data	<input type="checkbox"/>	
Facility SOPs	<input type="checkbox"/>		Construction data	<input type="checkbox"/>	
OTHER	<input checked="" type="checkbox"/>	2			

Question 6. Estimate the length, width, and depth of the contaminated region. What is the known or estimated volume of the source? If this is an estimated volume, explain carefully how the estimate was derived.

Block 1 Answer:

The SOOR stated that the contaminated dirt from the 20'x 20' ribboned area was loaded into four 55 gallon barrels and hauled to the RWMC. The estimated depth of soil removed, based on the number of barrels filled, would be approximately 1 inch (assuming 1/4 yd³ per barrel). Due to the limited extent of contamination and the area was cleaned up, it does not appear that a source remains. Also, the 1990 and 1991 surface radiological surveys did not detect any radioactive contamination in this area above background levels.

Block 2 How reliable is/are the information source/s? ☒ High ☐ Med ☐ Low (check one)
EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The areal extent and volume of contamination were taken from SOOR #75-21. The depth of contamination was calculated from this information.

Block 3 Has this INFORMATION been confirmed? ☐ Yes ☒ No (check one)
IF SO, DESCRIBE THE CONFIRMATION.

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information	<input type="checkbox"/>	_____	Analytical data	<input type="checkbox"/>	_____
Anecdotal	<input type="checkbox"/>	_____	Documentation about data	<input type="checkbox"/>	_____
Historical process data	<input type="checkbox"/>	_____	Disposal data	<input type="checkbox"/>	_____
Current process data	<input type="checkbox"/>	_____	Q.A. data	<input type="checkbox"/>	_____
Areal photographs	<input type="checkbox"/>	_____	Safety analysis report	<input type="checkbox"/>	_____
Engineering/site drawings	<input type="checkbox"/>	_____	D&D report	<input type="checkbox"/>	_____
Unusual Occurrence Report	<input checked="" type="checkbox"/>	1 _____	Initial assessment	<input type="checkbox"/>	_____
Summary documents	<input type="checkbox"/>	_____	Well data	<input type="checkbox"/>	_____
Facility SOPs	<input type="checkbox"/>	_____	Construction data	<input type="checkbox"/>	_____
OTHER	<input type="checkbox"/>	_____			

Question 7. What is the known or estimated quantity of hazardous substance/constituent at this source? If the quantity is an estimate, explain carefully how the estimate was derived.

Block 1 Answer:

No contamination is believed to remain based on surface radiological surveys and timely cleanup action at the time of the maintenance work completion.

Block 2 How reliable is/are the information source/s? ☒ High ☐ Med ☐ Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The SOOR stated that the contaminated dirt from the 20'x 20' ribboned area had been removed. The surface radiological survey is an annual practice.

Block 3 Has this INFORMATION been confirmed? ☒ Yes ☐ No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

The results of the 1990 and 1991 surface radiological surveys (ref. 3, 5) did not detect any radioactive contamination in this area above background levels. This area was re-surveyed in 1991 (12/20/91), per a request by WINCO Environmental Restoration (ref. 4).

Block 4 **SOURCES OF INFORMATION** (check appropriate box/es & source number from reference list)

No available information ☐ _____
 Anecdotal ☐ _____
 Historical process data ☐ _____
 Current process data ☐ _____
 Aerial photographs ☐ _____
 Engineering/site drawings ☒ 3, 5
 Unusual Occurrence Report ☒ 1
 Summary documents ☐ _____
 Facility SOPs ☐ _____
 OTHER ☒ 4

Analytical data ☐ _____
 Documentation about data ☐ _____
 Disposal data ☐ _____
 Q.A. data ☐ _____
 Safety analysis report ☐ _____
 D&D report ☐ _____
 Initial assessment ☐ _____
 Well data ☐ _____
 Construction data ☐ _____

Question 8. Is there evidence that this hazardous substance/constituent is present at the source as it exists today? If so, describe the evidence.

Block 1 Answer:

There is no evidence that the source still exists today. The SOOR (#75-21) indicated that the contaminated soil was removed and hauled to RWMC. Due to the limited extent of contamination and that the area was cleaned up, no source remains.

Also, the results of the surface radiation surveys conducted in 1990 and 1991 (ref. 3, 5) do not indicate the presence of radiation levels above background at this site.

Block 2 How reliable is/are the information source/s? ☒ High ☐ Med ☐ Low (check one)

EXPLAIN THE REASONING BEHIND THIS EVALUATION.

The SOOR (ref. 1) stated that the contaminated dirt from the 20'x 20' ribboned area had been removed and the surface radiological surveys are an annual practice.

Block 3 Has this INFORMATION been confirmed? ☒ Yes ☐ No (check one)

IF SO, DESCRIBE THE CONFIRMATION.

The results of the 1990 and 1991 surface radiological surveys did not detect any radioactive contamination in this area above background levels. This area was also re-surveyed a second time in 1991 (12/20/91), per a request by WINCO Environmental Restoration (Ref. 4).

Block 4 **SOURCES OF INFORMATION** (check appropriate boxes & source number from reference list)

No available information ☐ _____
 Anecdotal ☐ _____
 Historical process data ☐ _____
 Current process data ☐ _____
 Aerial photographs ☐ _____
 Engineering/site drawings ☒ 3, 5
 Unusual Occurrence Report ☒ 1
 Summary documents ☐ _____
 Facility SOPs ☐ _____
 OTHER ☐ _____

Analytical data ☒ 4
 Documentation about data ☐ _____
 Disposal data ☐ _____
 Q.A. data ☐ _____
 Safety analysis report ☐ _____
 D&D report ☐ _____
 Initial assessment ☐ _____
 Well data ☐ _____
 Construction data ☐ _____

REFERENCES

1. Allied Chemical Corporation, Significant Operating Occurrence Report #75-21, "Contamination, Valve Box B-9 Area", June 2, 1975.
2. WINCO, personal communication between John Williams (Environmental Compliance) and James Linhart (Environmental Compliance), December 10, 1991.
3. 1991 Surface Radioactivity Survey Maps
4. WINCO Health Physics Survey Report, "Survey of Tank Farm", December 20, 1991.
5. 1990 - 1991 Surface Radioactivity Cleanup Status.

ECA 30 REFERENCE 1.

ALLIED CHEMICAL CORPORATION

IDAHO CHEMICAL PROGRAMS - OPERATIONS OFFICE

30
Allied
Chemical

SIGNIFICANT OPERATING OCCURRENCE REPORT

INTERIM ☐ FINAL ☒

REPORT NO. 75-21 OBTAIN FROM OSES OFFICE? ☐ TIME & DATE OF OCCURRENCE 1000, 6-2-75
 OCCURRENCE SUBJECT Contamination, Valve Box B-9 Area
 OCCURRENCE LOCATION CPP Tank Farm TO WHOM REPORTED IN ACC. TO K. K. Kennedy, R. J. B.
 ACC. CONTACT (FOR ADD'L DETAILS) J. G. Linhart TIME & DATE OCCURRENCE REPORTED TO ACC. TO P.M., 6-2-75
 PRELIMINARY TYPE CLASSIFICATION FINAL TYPE CLASSIFICATION
☐ A ☐ B ☐ C ☒ OTHER ☐ A ☐ B ☐ C ☒ OTHER

NOTE: COMPLETE ITEMS 1 THROUGH 4 FOR ALL REPORTS. IF ADDITIONAL SPACE NEEDED, CONTINUE ITEM ON SEPARATE PAPER AND ATTACH TO REPORT.

1. DESCRIPTION OF OCCURRENCE (NATURE, EXTENT, AND EFFECTS)

CPP Maintenance was in the process of doing preventive maintenance (PM) work on waste valve located in tank farm underground boxes B-5 and B-9. Decontamination work had been complete on each of these boxes by Operations and Technical. Pre-work surveys showed B-9 to have the following radiation readings: 10 R/hr B+y and 500 mr/hr Y. Box B-5 had considerably lower readings and was not the main contributor to the later contamination problems.

Continue on attached page.

2. RELEVANT OPERATING CONDITIONS AT TIME OF OCCURRENCE:

Waste transfer lines and jets associated with boxes B-5 and B-9 had been isolated via danger tags and the system was not in use.

Continue on attached page.

3. CAUSE OF OCCURRENCE

☐ DESIGN ☐ MATERIAL ☐ PERSONNEL ☒ PROCEDURE ☐ OTHER ☐ UNDETERMINED AT THIS TIME

HOW CAUSE OF OCCURRENCE WAS DETERMINED: H.P. found workers to be contaminated after they had left the work area to go to lunch. H.P. then back-tracked the job to discover the extent of the contamination.

4. IMMEDIATE REMEDIAL ACTION TAKEN

The work was discontinued and an area 40' x 20' near boxes B-5 and B-9 was ribboned off by H.P. Contaminated blotter paper, tools, etc. were removed from the area.

Continue on attached page.

FOR ALL REPORTS:

REPORT ORIGINATED BY: J. G. Linhart DATE 6-5-75
 APPROVED BY: E. P. R. Richardt DATE 6-11-75
 BRANCH MANAGER
 APPROVED BY: J. G. Linhart DATE 6-11-75
 ASST. MGR.

FOR FINAL REPORT ONLY:

APPROVED BY: [Signature]
 CHAIRMAN, SIGNIFICANT OPERATING
 OCCURRENCE REVIEW BOARD
 DATE 6-11-75

NOTE: FOR FINAL REPORTS ONLY, COMPLETE REVERSE SIDE OF THIS FORM (ITEMS 5 THROUGH 8)

MANAGER, ID. DIV.
 DIRECTOR, OPER. SAFETY DIV. (ID. DIV.)
 DIRECTOR, PROC. & TECH. SUP. DIV. (ID. DIV.)
 GENERAL MANAGER, ICP (ID. DIV.)
 ASSISTANT GENERAL MANAGER, ICP (ID. DIV.)

MANAGER, OSES BRANCH, ICP (ID. DIV.)
 BRANCH MANAGERS, ICP (ID. DIV.)
 CHAIRMAN, ICP SPE. ADV. SYSTEMS REV. & COMPLIANCE OFFICER (ID. DIV.)

FINAL REPORT ONLY.

REPORT NO. _____ OCCURRENCE SUBJECT: _____

5. SUBSEQUENT CORRECTIVE ACTION TAKEN (IF APPLICABLE):

Contaminated dirt from the 20' x 20' ribboned area was loaded into four 55 gallon barrels. These barrels will be hauled to the burial ground. The above ground contaminated valve handles and pipe were decontaminated with methylchlor which did a good job of removing the blue grease.

(methylchloride)

003723

6. FINAL CORRECTIVE ACTION PROPOSED:

Future work on tank farm valves should include the following:

- a. Once the above ground extension handle angle irons are cut, the valve handles and any other pipe or permanent equipment such as riser covers should be covered with plastic.
- b. Re-emphasize need for respirator evaluation.
- c. Removed valve bonnet assemblies should be immediately bagged and taken to the decon room before the extension handle yokes are removed.
- d. Blotter paper had been used but was cut by rocks when stepped on. Plywood covered with several layers of blotter paper should be placed on the ground near the valve boxes where the men can stage from (undress, bag valves, pass tools, etc.).

Continue on attached page.

7. RESPONSIBILITY FOR CORRECTIVE ACTION ASSIGNED TO: J. G. Linhart8. SIMILAR PREVIOUS OCCURRENCES:IS THIS A RECURRENCE OF A PREVIOUS EVENT? ☐ YES ☒ NO

IF SO, WHAT IS (HAS BEEN) THE APPROXIMATE RECURRENCE FREQUENCY OR INTERVAL? _____

9. ESTIMATED COST OF OCCURRENCE: \$200.0010. MANAGEMENT EVALUATION:

Final corrective action seems adequate.

1. DESCRIPTION OF OCCURENCE (NATURE, EXTENT, AND EFFECTS): (Continued)

On Monday morning (6-2-75), maintenance started work in boxes B-5 and B-9. H.J. was present to monitor radiation exposures and a safe-work permit had been processed. After completing the morning's work, the crew proceeded to the CFP-601-602 process area where they were found to be contaminated.

2. RELEVANT OPERATING CONDITIONS AT TIME OF OCCURENCE: (Continued)

Maintenance procedures to PM the valves were as follows:

- a. A cutrode welder was used to cut the above ground angle iron on each extension handle so the extension handle could be lifted and disconnected from the valve.
- b. The bonnet of the in-box valve was unbolted and the extension handle universal and grease fitting were disconnected.
- c. The valve bonnet with bellows and plug was removed from the valve body, which is welded in the waste line.
- d. The valve bonnet assembly was transferred above ground where the extension handle yoke was removed and installed on a new valve bonnet assembly.
- e. The new valve bonnet assembly was lowered into the valve box and installed in the valve body and reconnected.

It should be noted that protective clothing was worn during the PM operation and full face respirators were worn by personnel working in the valve boxes. The valve bonnet assemblies removed from the valve boxes had blue lubricating grease on them and the extension handle universal joints were covered with a thin layer of rust. No other visual residual materials were noted on the valve bonnet assemblies.

4. IMMEDIATE REMEDIAL ACTION TAKEN: (Continued)

Four maintenance personnel were given whole body counts Monday (6-2-75) afternoon. Two of these same people were given second whole body counts on 6-3-75. A third whole body count has been requested of these same two people the week of 6-9-75 and a fecal sample has been requested from one of them. The results of these samples and body counts showed that internal doses to the people involved were not significant.

Work on the valve boxes resumed on 6-3-75. Fresh air respirators were worn while doing this work. The removed valve bonnet assemblies were decontaminated in the decon room prior to removing the extension handle yokes and installing them on the new valves. The ribboned off contaminated ground area was wetted with water.

The valve PM job in boxes B-5 and B-9 was completed on 6-3-75. All contaminated equipment was removed from the area. The 20' x 20' ribboned area was contaminated as follows: near B-9 box (~ 1 R/hr $\beta+\gamma$), rest of area (100 mr/hr $\beta+\gamma$ to 1000 c/m). This above ground contamination was found on workers clothes and some had contacted their skin. This contamination was probably from residual decon solution from the floor of the valve boxes, contaminated blue valve grease, or contamination from the valve bonnet assembly parts (bellows, plug, etc.). This contamination was very difficult to remove once contacted with the skin.

000723

o. FINAL CORRECTIVE ACTION PROPOSED: (Continued)

- a. The concrete lip of the valve box access riser should be covered with blotter paper.
NOTE: Plastic should not be used on the ground near the valve box riser (ref. item #d above and #e). It is too slick and could lead to a man falling down the riser into the valve pit, especially if the person has shoe covers on or there is grease on the plastic.
5. A copy of this SOOR report with this information will be placed in the tank farm valve PM file for future reference.
3. It is recommended that for future tank farm valve work, more than one H.P. be considered for the job. One could be used to keep track of the exposures and the other the contamination.

ECA 30 REFERENCE 2.

Westinghouse Idaho
Nuclear Company, Inc.

MEMO OF CONVERSATION

Date 12-10-91 Time 2M Commitment Made ☐ Yes ☒ No Date: 12-10-91Person Calling JOHN WILLIAMS Person Called TIM LINHARTRepresenting WINCO Representing WINCOPurpose of Conversation Details on SCOR #75-21

Text of Conversation

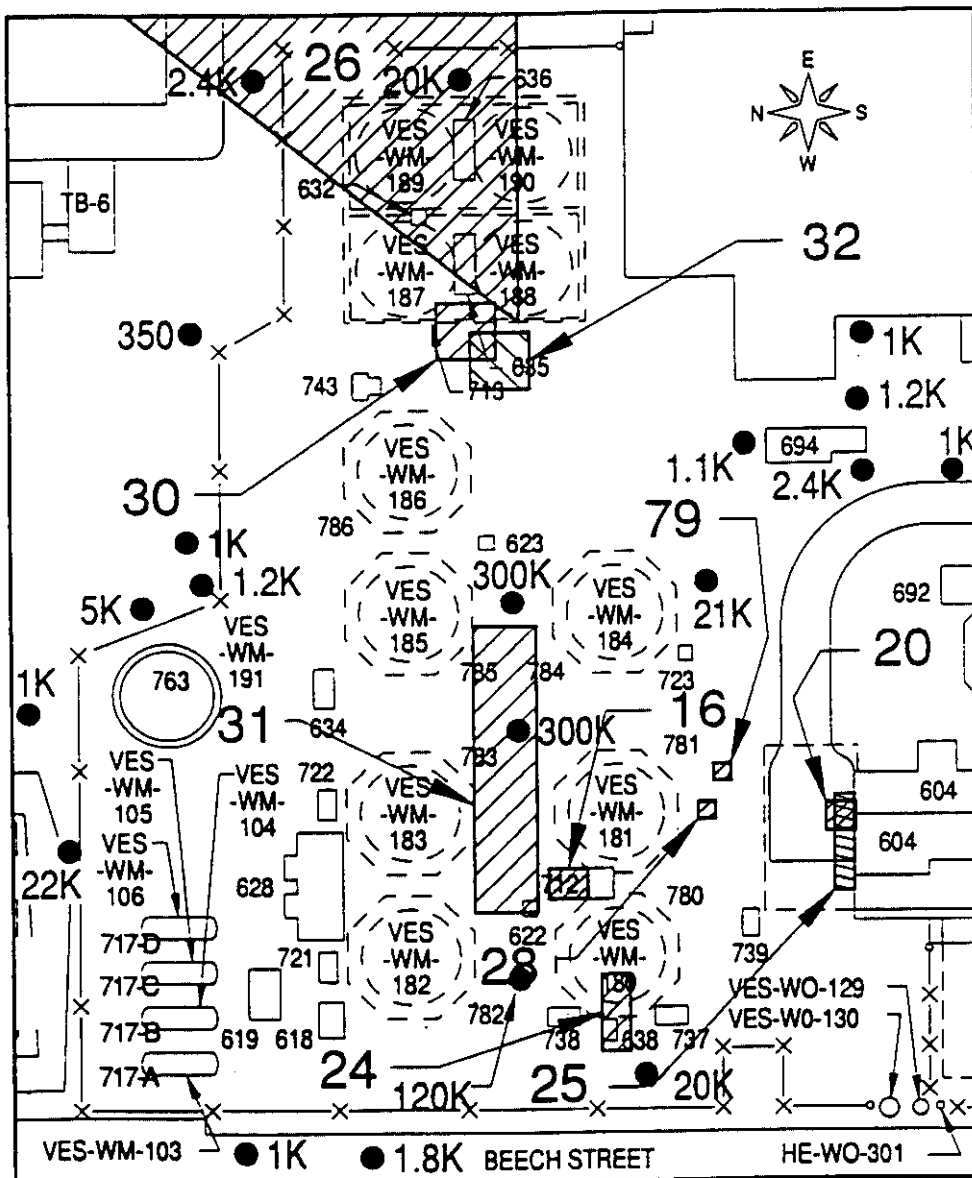
Mr. Linhart was the originator of the Significant Operating Occurrence Report (SCOR) #75-21. This 1975 SCOR discussed site CFP-30 (valve box B-9 area contamination). Mr. Linhart explained the detailed sequence of events from this SCOR. Other than clarifying the specific parts and functions of the equipment, in terms of the preventative maintenance work that took place, he did not have any additional information to add to the report.

Signed

Date

12/10/91

ECA 30 REFERENCE 3.



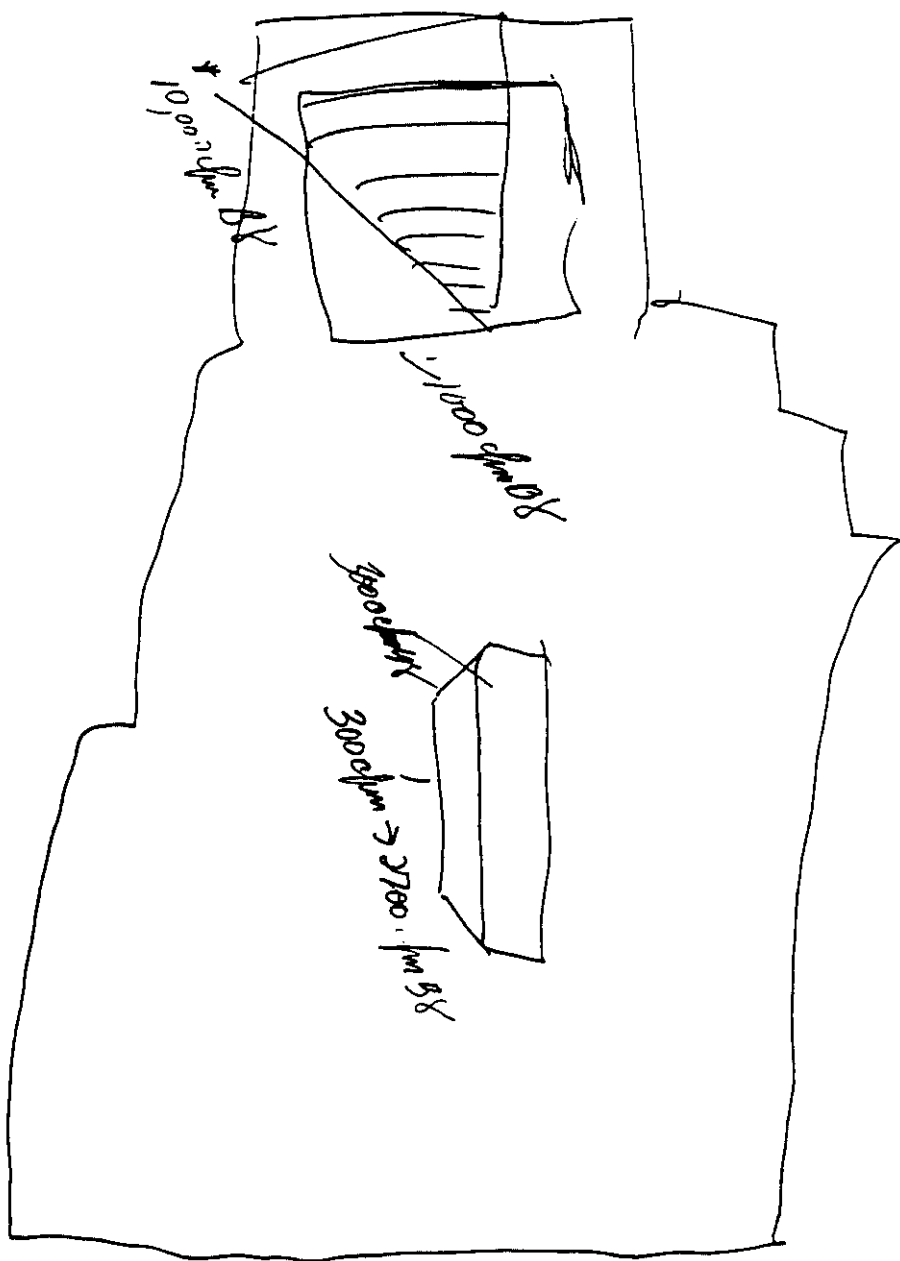
ICPP-A-18051
(12-91)

Site Locations within OU 3-07 with Rad Points

ECA 30 REFERENCE 4.

Recommended Followup

Sketch



Copy Sent to:

ECA 30 REFERENCE 5

WAG 3

